

REMARKS

Entry of the foregoing and reconsideration of the application identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.111 and in light of the remarks which follow, are respectfully requested.

By the above amendments, claim 2 has been canceled without prejudice or disclaimer. Claim 1 has been amended to recite that the different points of the tissue comprise i) points that were directly exposed to the external influence, and ii) points that were not directly exposed to the external influence. Support for this amendment can be found at least at the paragraph bridging pages 1 and 2 of the instant specification. Claims 1 and 3 have been amended for clarification and/or readability purposes. Claim 4 has been amended to delete the text in parentheses, "spectral filters and/or polarization filters, phase shifters". New claim 5 has been added which depends from claim 4, and which is directed to the subject matter deleted from claim 4.

In the Official Action, claims 1-4 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Without addressing the propriety of the Examiner's comments in connection with this rejection, it is noted that such rejection is moot in view of the above amendments of claims 1, 2 and 4. Specifically, claim 1 has been amended to recite the phrase "of tissue of the biological system", claim 2 has been canceled, and claim 4 has been amended to delete the text in parentheses. Accordingly, for at least the above reasons, withdrawal of the §112 rejection is respectfully requested.

Claims 1 and 3 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,500,197 (*Buesselmann*) in view of U.S. Patent Application

Publication No. 2002/0173831 (*Costa Dos Santos*). Claim 4 stands rejected under 35 U.S.C. §103(a) as being obvious over *Buesselmann* in view of *Costa Dos Santos*, and further in view of U.S. Patent Application Publication No. 2003/0093135 (*Denton et al*). Withdrawal of these rejections is respectfully requested for at least the following reasons.

Independent claim 1 recites a method for testing at least one external influence on a biological system by measuring photon emissions and delayed luminescence of tissue of the biological system, wherein the photon intensities are measured at different points of the tissue before and after application of an external influence, and wherein the different points of the tissue comprise i) points that were directly exposed to the external influence, and ii) points that were not directly exposed to the external influence.

Buesselmann discloses administering a full-body mist bath, wherein through the action of the mist particles, biophoton emission is increased in the person. See col. 1, line 55 to col. 2, line 41. *Buesselmann* discloses that emission intensity can be determined by measuring the light emitted from a blood sample of the person. See col. 2, lines 43-45.

Buesselmann does not disclose or suggest each feature recited in independent claim 1. For example, in the claimed method, photon intensities are measured at different points of the tissue after application of an external influence. The different points of the tissue comprise i) points that were directly exposed to the external influence, and ii) points that were not directly exposed to the external influence. Thus, the claimed method comprises the measurement of photon intensities at points of the tissue after application of an external influence, that were

not directly exposed to the external influence. *Buesselmann* does not disclose or suggest such subject matter of the claimed method. By comparison, *Buesselmann* merely discloses determining the emission intensity by measuring the light emitted from a blood sample of the person. There is simply no recognition or suggestion of measuring photon intensities at **points of the tissue after application of an external influence, that were not directly exposed to the external influence.**

As discussed in the instant specification, Applicants have discovered that external influences can, for example, trigger changes in photoemission on parts of the tissue that were not directly treated. Thus, for example, comparing the "responses" on tissue sections that were not directly treated to "responses" on treated tissue sections as reflected in the photoemission measurements, can yield significant results concerning the effects of the examined external influence. See paragraph bridging pages 1 and 2. *Buesselmann*, on the other hand, is not concerned at all with measuring the effects of the application of an external influence upon points that were not directly exposed to the external influence.

Furthermore, *Buesselmann* discloses the measurement of emission intensity by measuring the light emitted from a **blood sample** of the person. See col. 2, lines 43-45. *Buesselmann* has no disclosure or suggestion of measuring photon intensities at different points of **tissue**, as is presently claimed. Moreover, since blood typically undergoes circulation in the person, it is not clear how measuring blood samples as taught by *Buesselmann* could provide meaningful and accurate measurements of photon intensities at different points, for example, of the tissue.

Costa Dos Santos fails to cure the above-described deficiencies of *Buesselmann*. In this regard, the Patent Office has relied on *Costa Dos Santos* for

disclosing that certain areas of the body emit considerably higher biophoton emission. The Examiner has alleged that in view of such disclosure, it would have been obvious "to take biophoton emission readings of different parts of the body prior to and after the application of the stimulus." See Official Action at page 4. Even if *Costa Dos Santos* would have been combined with *Buesselmann* in the manner suggested, however, the alleged combination would not have resulted in the claimed method. Like *Buesselmann*, *Costa Dos Santos* does not disclose or suggest the measurement of photon intensities at **points of the tissue after application of an external influence, that were not directly exposed to the external influence**, as is presently claimed. That is, even if it would have been obvious to conduct measurements at different parts of the body prior to and after application, this modification still would not have resulted in the measurement at points of the tissue after application of an external influence, **that were not directly exposed to the external influence**. Exemplary advantages of such measurement are discussed above and, like *Buesselmann*, *Costa Dos Santos* fails to provide any recognition or suggestion of the significance of such measurement.

Denton et al also fails to cure the above-described deficiencies of *Buesselmann*. In this regard, the Patent Office has relied on *Denton et al* for disclosing the use of a monochromatic light produced by a filter. See Official Action at page 4. Even if *Denton et al* would have been combined with *Buesselmann* in the manner suggested by the Patent Office, however, the alleged combination nevertheless fails to disclose or suggest the measurement of photon intensities at points of the tissue after application of an external influence, that were not directly exposed to the external influence, as recited in claim 1.

For at least the above reasons, it is apparent that independent claim 1 is non-obvious over the applied documents. The dependent claims are allowable at least by virtue of their direct or indirect dependence from independent claim 1. Thus, a detailed discussion of the additional distinguishing features recited in the dependent claims is not set forth at this time.

Accordingly, withdrawal of the above §103(a) rejections is respectfully requested.


From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: June 29, 2009

By:



Roger H. Lee
Registration No. 46317

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620